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Federal Communications Commission  
Washington, D.C. 20554

OCT 31 1997

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FEDERAL COMMUNICATIONS COMMISSION  
U.S. DEPARTMENT OF COMMERCE

The Honorable Sidney R. Yates  
U.S. House of Representatives  
2109 Rayburn House Office Building  
Washington, DC 20515-1309

Dear Congressman Yates:

Thank you for your letter of October 14, 1997, on behalf of your constituent Shure Brothers Incorporated, regarding the Commission's Notice of Proposed Rule Making (Notice) in ET Docket No. 97-157 to reallocate TV Channels 60-69. Shure Brothers expresses concern that, as a result of this Commission proceeding, the reallocated spectrum may cease to be available for use by Low Power Auxiliary Stations (LPAS) authorized pursuant to Part 74 Subpart H of the Commission's rules. Shure Brothers states that it manufactures, among other things, wireless microphones which operate under the LPAS rules.

As Shure Brothers indicates, LPAS operations are secondary to the primary use of the spectrum, currently television broadcasting. In the Notice, the Commission proposed to reallocate the 24 megahertz of spectrum at 764-776 MHz and 794-806 MHz to the Fixed and Mobile services and to designate this spectrum for public safety uses. The Commission proposed to reallocate the remaining 36 megahertz of spectrum to the Fixed and Mobile services and to retain its current Broadcasting allocation. The Notice did not address explicitly the secondary LPAS use of the spectrum. Since secondary uses are required to cease operation if they cause harmful interference to primary services and must also accept any interference to their operations caused by primary services, I do not anticipate any change to the status of LPAS in the reallocated spectrum, at least with respect to the portion not designated for public safety use. In any event, Shure Brothers has filed Comments in the reallocation proceeding, and those Comments will be considered in the Commission's Report and Order, which I anticipate will be completed by the end of the year.

Sincerely,

*Bruce Franca*

Richard M. Smith  
Chief  
Office of Engineering and Technology

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SIDNEY R. YATES  
9TH DISTRICT, ILLINOIS

COMMITTEE  
APPROPRIATIONS

ING MEMBER, INTERIOR AND  
RELATED AGENCIES

FOREIGN OPERATIONS

**Congress of the United States**  
**House of Representatives**  
**Washington, DC 20515-1309**

WASHINGTON OFFICE  
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20515-1309  
202-225-2111

DISTRICT OFFICES  
230 S. DEARBORN STREET  
CHICAGO, IL 60604  
312-353-4596

2100 RIDGE AVENUE  
EVANSTON, IL 60201  
(847) 328-2610

DET  
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6655

October 14, 1997

Mr. Reed Hundt  
Chairman  
Federal Communications Commission  
1919 M Street, NW  
Washington, D.C. 20554

Dear Mr. Chairman:

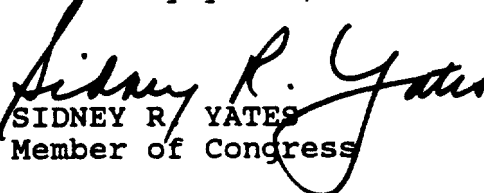
I am writing on behalf of Shure Brothers Incorporated, 222 Hartrey Avenue, Evanston, Illinois 60202, which is located in my congressional district.

Shure Brothers is involved in the design, manufacture and sale of wired microphones, wireless microphone systems, audio circuitry products and related accessories. The company is concerned about the FCC's recently published Notice of Proposed Rule Making (ET Docket 97-157, FCC 97-245; dated July 31, 1997).

I am enclosing a copy of Shure Brothers' comments on the proposed rule. The company is proposing that the FCC allocate a portion of the 36 MHz for existing low power auxiliary station users, particularly for wireless microphone system users.

I would appreciate it if you would review Shure Brothers' comments and bear them in mind as you write the final rule.

Sincerely yours,

  
SIDNEY R. YATES  
Member of Congress

Enclosure

Due 11-12-97

# SHURE

MICROPHONES AND ELECTRONIC COMPONENTS

Shure Brothers  
Incorporated  
222 Hartrey Avenue  
Evanston, IL 60202-3696 • U.S.A.

*office of the president*

October 8, 1997

The Honorable Sidney R. Yates  
2100 Ridge  
Evanston, IL 60201

Dear Mr. Yates:

Shure Brothers Incorporated is a worldwide leader in the design, manufacture, and sale of wired microphones, wireless microphone systems, audio circuitry products, and related accessories. Shure employs several hundred associates in our Illinois facilities, and our Corporate Headquarters is based in Evanston.

Recently, the Federal Communications Commission (FCC) released a Notice of Proposed Rule Making (ET Docket 97-157, FCC 97-245) which seeks to reallocate TV Channels 60-69, the 746-806 MHz band. This Notice was published in the Federal Register on July 31, 1997. The FCC proposal dedicates 24 MHz for Public Safety use, and calls for the remaining 36 MHz to become available for fixed, mobile, and broadcasting uses on a competitive bid basis.

Wireless audio systems, such as Shure's wireless microphone systems, presently use frequencies within this band and operate as Low Power Auxiliary Stations (LPAS) per FCC guidelines. Due to the relatively low number of full power television broadcasting stations operating within this range, it has been particularly desirable for this purpose.

Shure is concerned about the possible loss of wireless audio spectrum, especially since there are no dedicated, protected frequencies in the United States that are suitable for high-quality multi-channel wireless system operation. In addition, the FCC's proposal did not specify what would happen to existing Low Power Auxiliary Stations (LPAS) users when the proposed rules become effective.

Shure has filed comments with the FCC on this proposal. For your convenience, a copy of our submission letter is attached. Although the original comment period ended on September 15, 1997, the period for reply comments has now been extended through October 14, 1997. We have asked all of our competitors in the field of wireless microphone systems to also make their comments known to the FCC.

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SIDNEY R. YATES

October 8, 1997

We are asking the FCC to allocate a portion of the remaining 36 MHz. proposed for fixed, mobile, and broadcasting uses, for existing Low Power Auxiliary Stations (LPAS) users, and specifically, wireless microphone system users. As you can imagine, none of the companies in the wireless microphone system industry are capable of out-bidding any of the broadcast companies related to radio spectrum. We ask that you support our views with the FCC and encourage you to make your views on this topic known to the FCC. Your comments should be addressed to:

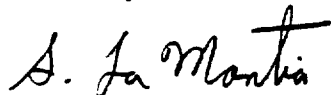
Federal Communications Commission  
Office of the Secretary  
1919 M Street NW  
Room 222  
Washington, DC 20554.

With the appropriate changes, you are welcome to use part or all of the attached letter. Be certain to include the docket number (ET Docket 97-157, FCC 97-245). Further information on the Notice of Proposed Rule Making is available on the FCC Web Site at [www.fcc.gov/oet/dockets/et97-157/](http://www.fcc.gov/oet/dockets/et97-157/) or by contacting Sean White at the Office of Engineering and Technology at (202) 418-2453 ([swhite@fcc.gov](mailto:swhite@fcc.gov)).

Radio spectrum is a scarce, and increasingly valuable resource. Experience has shown that once allocations are lost, they may never be recovered. That is why we at Shure believe it is important to let the FCC know about the present and future needs of our wireless audio system customers.

Thank you for your support of this important issue. Feel free to contact me regarding this issue.

Sincerely,



Santo LaMantia

SL:PH  
Enc.



MICROPHONES AND ELECTRONIC COMPONENTS

Shure Brothers  
Incorporated

222 Hartrey Avenue  
Evanston, IL 60202-3696 • U.S.A.

Federal Communications Commission  
Office of Secretary  
Washington, D.C. 20554

In the matter of:

Notice of Proposed Rule Making	)	ET Docket No. 97-157
Reallocation of TV Channels 60-69,	)	FCC 97-245
the 746-806 MHz Band	)	FR Doc. 97-20078

#### COMMENTS OF:

Shure Brothers Incorporated  
Edgar C. Reihl, P.E.  
Principal Engineer  
222 Hartrey Avenue  
Evanston, IL 60202-3696

Shure Brothers Incorporated hereby files these comments on September 10, 1997 concerning the Reallocation of TV Channels 60-69, the 746-806 MHz Band, ET Docket No. 97-157, FCC 97-245, and FR Doc. 97-20078. Shure is a manufacturer of professional wireless audio products which operate within the 746-806 MHz band. Shure holds Type Approvals granted by the Federal Communications Commission (FCC) for these products.

#### SUMMARY

Shure requests that Low Power Auxiliary Stations (LPAS), which currently operate in the 746-806 MHz band, be included in this proceeding. Shure further requests that

LPAS equipment continue to be permitted to operate in this band on a secondary, non-interference basis throughout the duration of the digital TV transition period. Shure further requests that, even if LPAS operations are retired from the new exclusive public safety segments at 764-776 and 794-806 MHz at the conclusion of the digital TV transition period, LPAS equipment be permanently assigned to operate in the non public safety segments of 746-764 and 776-794 MHz on a secondary, non-interference basis, in addition to all other spectrum which is retained for television broadcasting.

#### DISCUSSION

Wireless audio systems operating in the television broadcasting channels operate on a secondary, non-interference basis as Low Power Auxiliary Stations (LPAS) licensed by the FCC. Considerable field experience has shown that this arrangement has worked well, and that it is practical to share TV spectrum with low power narrowband transmitters. The 746-806 MHz band has proven particularly desirable for LPAS operation due to the relatively low number of full power television stations operating in this part of the spectrum.

The FCC has proposed, in this Notice of Proposed Rule Making (NPRM), to reallocate the 746-806 MHz band to other services. In particular, the FCC has proposed to allocate 24 MHz for public safety in two bands, from 764-776 MHz and 794-806 MHz. In addition, it has proposed to allocate the remaining 36 MHz to the fixed, mobile, and broadcasting services, and to offer licenses on a competitive bid basis.

**Shure Brothers Incorporated -- ET Docket No. 97-157, FCC 97-245**

**The FCC has stated in its proceedings that it relied on the recommendations of the Public Safety Wireless Advisory Committee (PSWAC) in its decision to allocate the 764-776 and 794-806 MHz bands for the exclusive use of public safety services. Shure has no basis on which to debate this decision. However, all Shure UHF wireless audio systems sold to date operate in the 746-806 MHz band, as do systems from other manufacturers. Thus, users could find their operations partially, or in some cases, entirely displaced by this Rule Making.**

**The FCC has stated that it proposes to "protect full-power TV stations in the band until the transition to digital television (DTV) is complete, and to retain the secondary status in the band of Low Power TV (LPTV) and TV translator stations". Shure notes the apparent omission of any mention of Low Power Auxiliary Stations (LPAS) from this proceeding. Since LPAS equipment is an integral part of the news gathering and programming operations of most, if not all full and LPTV stations (including those full and LPTV stations operating in other parts of the TV spectrum), we propose that the FCC should consider the impact of this proceeding upon such stations.**

**In particular, Shure proposes that LPAS operations should be included in this proceeding and that they should be afforded the same secondary non-interference status that they presently have during the transition period to digital television, in the full 746-806 MHz band. This should pose a minimal interference threat to public safety operations in those portions of the band being newly allocated to them, particularly in comparison to the other services (e.g., full power and low power TV stations) which the**

**Shure Brothers Incorporated -- ET Docket No. 97-157, FCC 97-245**

**FCC proposes to permit to continue to operate on a shared basis during the digital TV transition period. It will also afford time for existing LPAS users to modify their equipment for operation in another part of the band which is not used by public safety. Some LPAS users may be forced to retire their equipment if it cannot be modified, in which case, the provision of a transition period would allow them to recover a portion of their investment and prevent disruption of LPAS operation.**

**Upon the conclusion of the digital TV transition period, Shure proposes that, even if LPAS operations are retired from the new exclusive public safety segments at 764-776 and 794-806 MHz, LPAS operations at least be permitted to continue permanently on a secondary non-interference basis in the remaining 36 MHz of spectrum not exclusively assigned to public safety, e.g. 746-764 and 776-794 MHz. It is in this portion of the spectrum that the FCC has proposed to continue to allow TV broadcasting after the conclusion of the transition period.**

**In the subject Proposal, the FCC has highlighted the need for spectrum space for low power television (LPTV) and translator stations, and has solicited comments from the public on the most suitable part of the spectrum for these stations to operate. It is the opinion of Shure that Low Power Auxiliary Stations (LPAS) should be included in this inquiry. Shure believes that LPAS can coexist well with LPTV and translator operations, and should be permitted to operate in the same bands as these services. In addition, Shure proposes that in order to provide the necessary degree of flexibility to accommodate existing and future LPAS, LPTV and translator stations, the FCC should**



**Shure Brothers Incorporated -- ET Docket No. 97-157, FCC 97-245**

continue to permit these services to operate on a secondary basis in the non public safety segments of the 746-806 MHz band, e.g. 746-764 and 776-794 MHz, as well as all other spectrum which will be retained for television broadcasting after the digital TV transition period has ended.

The FCC has previously decided to relax many of the UHF "taboos" that limited the number of TV stations which could operate. These restrictions were based on technical limitations at the time the UHF TV service was initiated. By relaxing these restrictions, the FCC has made it possible for all currently licensed TV stations to operate with both analog and digital transmitting facilities during a transition period. At the end of this period, when stations are required to relinquish one of their channels, these channels will become available for reassignment. Having demonstrated the feasibility of operating an increased number of full power facilities in this spectrum, there is every reason to believe that additional new full power TV stations may be licensed for operation on the channels which have been returned. Thus, the overall density of TV spectrum use is likely to continue at or near the level which will be established at the peak of the digital TV transition period.

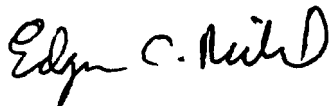
In urban areas, this will mean that it will continue to be difficult to find usable spectrum for LPAS and LPTV operations, even after the digital TV transition period has ended. (The same would be true of translator stations, except that these typically operate in sparsely populated or underserved areas). Therefore, retaining the non public safety band segments from 746-764 and 776-794 MHz for LPAS, LPTV, and translator use on

a secondary basis would provide increased flexibility for the operation of these stations. The FCC has postulated this use (with the exception of LPAS facilities) in the instant proceeding, and Shure concurs with this proposal.

### CONCLUSION

For the reasons stated above, Shure requests that Low Power Auxiliary Stations (LPAS), which currently operate in the 746-806 MHz band, be included in this proceeding. Shure further requests that LPAS equipment continue to be permitted to operate in this band on a secondary, non-interference basis throughout the duration of the digital TV transition period. Shure further requests that, even if LPAS operations are retired from the new exclusive public safety segments at 764-776 and 794-806 MHz at the conclusion of the digital TV transition period, LPAS equipment be permanently assigned to operate in the non public safety segments of 746-764 and 776-794 MHz on a secondary, non-interference basis, in addition to all other spectrum which is retained for television broadcasting.

Respectfully submitted,



Edgar C. Reihl, P.E.

Principal Engineer  
Shure Brothers Incorporated  
222 Hartrey Avenue  
Evanston, IL 60202-3696  
September 10, 1997

